

disregards the scientist and goes his own sweet way constructing imaginary "reals" of his own) as that the philosopher tries to make a consistent world safe for the sciences to live in without their mutual destruction—an increasingly difficult task. Kant attempted it in his day and most present-day metaphysics are directly or indirectly concerned with the same problem, and pragmatism from its nature particularly so. But Professor Schiller, in his most suggestive treatment of teleology, is far from being merely the submissive recorder of scientific achievement that perhaps his view of truth should make him. As he points out more than once, the sequence A—B may mean not "because A therefore B", but "A in order that B." All that science can observe is the sequence—as Hume showed long ago—and Kant's attempt to put back causality as an *a priori* category begs the question—if mind puts cause there mind can take it away, and it is clearly the duty of pragmatism to see if a teleological concept "works" as well as or better than a merely causal one.

The truth of the matter is that the rigid and arbitrary "billiard-ball" conception of causality so long beloved of the sciences is a serious stumbling-block, and now that even the scientists are admitting indeterminism into their theories there is more hope for metaphysics.

Must philosophers disagree? We hope so. The principle of "novelty" indeed makes it almost essential, and the world would be the poorer if there were no one for Professor Schiller so entertainingly to disagree with.

W. L. FARRER.

STERILIZATION

Crowley, Ralph H., M.D. *The Role of Sterilization in the Prevention of Mental Defect and Disorder.* (Howard Journal, Vol. IV, No. 1, 1934.)

DR. CROWLEY states that if there has been in some quarters exaggeration of the social evils arising from mental defect and disorder, of their alleged unchecked growth, and of neglect on the part of the State to combat so

serious a menace to its welfare, it is yet more true that there has been serious lack of appreciation on the part of individuals and the community generally of the facts of the situation and of the need to take more energetic action to secure prevention of these evils. It may be observed, however, that it is no less true to say that individuals and the public are bewildered by the lack of more precise knowledge in regard to the modes of transmission of hereditary factors, the complexity of the problems involved, and the opposing views of experts. Indeed, Dr. Crowley warns us that the issues are not clear cut, and that we may find ourselves lost in a sea of controversy as to the parts played respectively by heredity and environment. Also he reminds us that this latter consideration is an essential difficulty when we come to consider the place and value of sterilization as a means of combating the influence of mental defect and disorder; and he emphasizes the fact that sterilization may be expected to prove of value in direct proportion to the part played by heredity, and that environmental factors may accentuate inherited weakness.

It will be remembered that the Brock Committee, of which Dr. Crowley was a member, used the term environment in a wide sense to include any adverse circumstance of the surroundings in the life history of mentally defective individuals at any stage after the fertilization of the ovum up to the time at which the development of the mind is complete. But although the date of fertilization can be ascertained with accuracy, different views may be held as to the time when the development of the mind is completed. Moreover, this may vary in different subjects although the legal definition of mental defect, "a condition of arrested or incomplete development of mind existing before the age of 18 years, whether arising from inherent causes or induced by disease or injury," may mislead some to consider that the development of the mind reaches completion at this age.

Dr. Crowley reminds his readers that the Committee instituted an inquiry into the mental condition of the children of known

defectives, that between 40 and 50 per cent. over the age of seven were either mentally defective or dull, that the percentage of 22·5 of deaths among the children was very high, and that the belief that abnormal fertility was characteristic of mental defectives was not confirmed. Although this view appears to have arisen mainly because of cases which received publicity in the Courts and by the Press, it has not been accepted generally by prison Medical Officers in regard to delinquent defectives.

The article refers to the greater incidence of abnormal mental conditions in families of higher- than in families of lower-grade defectives, to the conclusion that certain rare types of mental defect are recessive characters, to the probability that further investigation and study will demonstrate that the Mendelian theory will explain satisfactorily the transmission of all types of mental defect and disorder; that in regard to mental disorder there is probably in the majority of cases an inherited predisposition, and that were it not for this predisposition exciting factors would have comparatively little effect. The advantages and disadvantages of compulsory and voluntary sterilization, and the effects of vasectomy and salpingectomy are also set out briefly.

Probably all will agree with the author that the Carrier constitutes the crux of the problem, for few can be unacquainted with sporadic and unexpected cases of mental defect in the families of their friends and associates.

The Editor of the *Howard Journal* calls attention to the fact that the publication of this article does not in any way commit the Howard League to support the policy outlined on which it has taken no corporate decision. The readers of the *Journal* may be influenced by Dr. Crowley's reference to the statement of the Brock Committee that sterilization "does nothing to improve the mental condition and it does not lessen sexual activity. The unstable and anti-social defective remains unstable and anti-social. The thief remains a thief. The erotic girl or youth will still need institutional care. The

impossibility of procreation will not save them from being a social menace."

The article is clear and moderate. It will appeal particularly to those who consider that in this matter, as in other social problems, it is necessary that not only the experts, but the public and the individuals who may be immediately concerned, distinguish between what is essential and what is subordinate.

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MIND AND BRAIN

Campion, George C., and Smith, Professor Sir Grafton Elliot. *The Neural Basis of Thought.* London, 1934. Kegan Paul, Trench, Trubner & Co. Ltd. Pp. viii + 167. Price 9s.

THIS book aims, we are told, "at presenting the neurological aspect of a theory of knowledge which was published eleven years ago." Whilst the theory is Campion's, the neurological support is Smith's, and the thesis to be established is "that the multitudinous and diverse concepts in their equally multitudinous and diverse groupings have their neural counterparts in what Sir Henry Head has called 'neural schemata.'" But such a thesis is not new nor does it to-day need the fancied weight of authority to give it verisimilitude. To mention but a few—Wilson's *Education, Personality and Crime*, published in 1908; Goddard's *Psychology of the Normal and Subnormal*, 1924; and A. C. Douglas's *Physical Mechanism of the Human Mind*, 1932—all deal with a similar thesis, that concepts have their neural counterparts, although, to quote Campion and Smith, "the terms in which their conclusions are expressed differ in the way which is usual where workers in the same field of research are engaged on the same problem, but working in isolation from one another."

The histological evidence adduced in this book in support of Campion's theories is definitely not up to date and rather beside the point for, with one or two exceptions, there is little or no reference to any work in